#### PATENT APPLICATION

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of Docket No: Q79404

Hiroaki KISHIOKA, et al.

Appln. No.: 10/765,359 Group Art Unit: 1794

Confirmation No.: 1537 Examiner: Anish P. Desai

Filed: January 28, 2004

For: DOUBLE-SIDED PRESSURE-SENSITIVE ADHESIVE SHEET AND TOUCH PANEL-

PROVIDED DISPLAY DEVICE

## REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41

#### **MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.41, Appellant respectfully submits this Reply Brief in response to the Examiner's Answer dated February 2, 2011. Entry of this Reply Brief is respectfully requested.

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## **STATUS OF CLAIMS**

Claims 1, 2, 5 and 6 are pending in the application.

Claims 3 and 4 have been canceled.

Claims 1, 2, 5 and 6 are rejected.

This an appeal from the Examiner's rejection of claims 1, 2, 5 and 6 under 35 U.S.C. §112, 1<sup>st</sup> paragraph for inadequate written description; from the rejection of claims 1, 2 and 5 under 35 U.S.C. § 103 as being obvious over Kishioka (US 2002/0098352) in view of Hitoshi et al (EP 0930322A2); and from the rejection of claim 6 under 35 U.S.C. § 103(a) as being obvious over Kishioka et al in view of Hitoshi et al and further in view of Okabe et al.

## **GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The grounds of rejection to be reviewed, including the statute applied, the claims subject to each rejection and the references relied upon by the examiner are as follows:

Claims 1, 2, 5 and 6 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement.

Claims 1, 2 and 5 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kishioka (US 2002/0098352 A1) ("Kishioka") in view of Hitoshi et al. (EP 0930322A2) (EP '322).

Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kishioka in view of EP '322 as applied to claims 1, 2 and 5 above, and further in view of Okabe et al. (JP 07-105781).

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## **ARGUMENT**

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1. The rejection of claims 1, 2, 5 and 6under 35 U.S.C. § 112, 1<sup>st</sup> paragraph for inadequate written description should be reversed because the Examiner has not met his burden of establishing that Applicants were not have possession of the claimed invention.

Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement for the reasons set forth at pages 3-4 of the Examiner's Answer.

Specifically, the Examiner takes the position that the limitation "the major monomer for the respective pressure sensitive adhesive layers is constituted from the same monomer", is not supported by the specification. According to the Examiner, while there are specific examples in the specification that utilize polymers made from the same monomer, i.e., butyl acrylate, this does not provide support to broadly recite that the major monomer for each layer is constituted from the same monomer. In other words, the Examiner considers that the claim language of "same monomer" is broader in scope than what is supported by the specification.

Appellants respectfully disagree.

The specification clearly discloses that the pressure-sensitive adhesive for forming the pressure-sensitive adhesive layer in the touch panel side and the pressure-sensitive adhesive for forming the pressure-sensitive layer in the display device side may be the same. See the paragraph bridging pages 20-21. The specification further discloses using the same monomer as the major monomer component in both the pressure-sensitive adhesive layers of the touch panel side and the display device side, wherein butyl acrlylate is merely exemplary. See the paragraph bridging pages 21-22. Moreover, the specification discloses several monomers suitable for the

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claimed invention at, for example, pages 22-23, and one of ordinary skill in the art can readily use any one of the disclosed monomers as the "same monomer" as described in the claims.

Specifically, the specification at page 21 has the following disclosure:

Concretely, in the case where an acrylic pressure-sensitive adhesive is used as the pressure-sensitive adhesive, for example, when a strong adhesion type acrylic pressure-sensitive adhesive containing butyl acrylate as the major monomer component is used as the pressure-sensitive adhesive of forming the pressure-sensitive adhesive layer in the touch panel side, it is preferable to use a weak adhesion type acrylic pressure-sensitive adhesive containing butyl acrylate as the major monomer component as the pressure-sensitive adhesive layer in the display device side.

This disclosure teaches butyl acrylate as the major monomer component for both the strong adhesion type acrylic PSA and the weak adhesion type acrylic PSA as an "example".

Additionally, the working examples employ butyl acrylate as the major monomer component in the respective adhesive layers (e.g., Example 1). Thus, the specification clearly provides support for the recitation that "the major monomer for the respective pressure-sensitive adhesive layers is constituted from the **same monomer**" as previously pointed out, for example, in the Amendment filed July 10, 2009 at page 9.

Appellants further submit that and Example 2 of the specification employs 2-ethylhexyl acrylate as the major monomer component in the respective adhesive layers. Thus, the Examiner is incorrect in stating that the specification only provides support to recite that the major monomer component in each PSA layer is butyl acrylate as stated on page 21 and in Example 1 of the specification.

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Accordingly, the specification provides adequate support for the present claims and the Examiner has not met his burden of establishing that Applicants were not in possession of the claimed invention at the time the application was filed.

In view of the above, Appellants respectfully submit that the rejection under 35 U.S.C. § 112, 1<sup>st</sup> paragraph should be reversed.

2. The rejection of claims 1, 2 and 5 under 35 U.S.C. §103(a) as being unpatentable over Kishioka in view of EP '322 and the rejection of claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Kishioka in view of EP '322 and further in view of Okabe et al should be reversed because the Examiner has not made a *prima facie* showing of obviousness.

The rejection of claims 1, 2, and 5 under 35 U.S.C. §103(a) as allegedly being unpatentable over Kishioka in view of Hitoshi et al. is maintained.

The rejection of claim 6 under 35 U.S.C. §103(a) as allegedly being unpatentable over Kishioka in view of Hitoshi et al. as applied to claims 1, 2, and 5 above, and further in view of Okabe et al. is maintained.

Appellants maintain that the rejections under 35 U.S.C. § 103 should be reversed because the Examiner has not made a *prima facie* showing of obviousness for the reasons previously presented in the Appeal Brief and additionally based on the following.

### **Thickness of Double-Sided Adhesive Sheet**

At paragraph 26 of the Answer, the Examiner maintains that Kishioka discloses thickness of the individual PSA layer in general ranges from 5 to 500 μm and from about 10 to 100 μm (paragraph [0064]) and therefore if two PSA layers are used, it is clear that the total thickness

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would be 10-1,000 µm and 20-200 µm, and that the range taught by Kishioka clearly overlaps the presently claimed thickness. In support, the Examiner cites MPEP §2144.05, which states that in the case where the claimed range "overlap or lie inside ranges disclosed by the prior art", a prima facie case of obviousness exists. The Examiner further asserts that Kishioka teaches that the thickness of the PSA layer can be approximately set as long as the handling properties are not deteriorated (see paragraph [0064]).

The Examiner considers that while Kishioka does not explicitly teach the total thickness of the double-sided PSA sheet, based on the information given in Kishioka's disclosure with respect to the individual thickness of the PSA layer and the fact that Kishioka discloses multilayer PSA tape (paragraph [0065]) selecting the total thickness of the PSA sheet so as to arrive at the Appellants' claimed total thickness of the double-sided PSA sheet would have been obvious, motivated by the desire to provide suitable handling properties to the PSA sheet of Kishioka.

Appellants respectfully disagree for the reasons of record and in view of the following.

In addition to the arguments of record, which are incorporated herein by reference, Appellants submit that the Examiner's position is improperly based on hindsight as there is no apparent reason to choose two or more PSA layers, each having a thickness within the very broad ranges of from 5 to 500 µm and from about 10 to 100 µm taught by Kishioka or the teaching of EP '322 of a PSA layer having a thickness of from 10 to 100 pm, such that the total thickness would be within the claimed range of 10 to 50 µm. As previously pointed out there are thousands of combinations of the thicknesses of the two PSA layers and there is no teaching or

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suggestion in the references to specifically lead to a combination of PSA layers having a thickness within the recited range.

"Major monomer component constituting each pressure-sensitive adhesive layer is 80% by weight or more based on the whole amount of the monomer components"

The Examiner states that EP '322 teaches a certain concept, namely the proportion of the major monomer component constituting each pressure-sensitive adhesive layer is 80% by weight or more based on the whole amount of the monomer components as presently claimed and in combination with the primary reference discloses the presently claimed invention.

However, Appellants submit that the description in Kishioka relied on by the Examiner, i.e., paragraph [0039] relates to copolymerizable monomers containing no aromatic ring. The copolymerizable monomers containing no aromatic ring described in paragraph [0039] of Kishioka is not a major component of the acrylic polymer of Kishioka. This is clear from the description at paragraph [0038].

In addition, Kishioka describes in paragraph [0060] that the proportion of the aromatic ring-containing acrylic monomers blended is preferably 30 percent by weight or more to the total amount of monomer components. In fact, Kishioka describes an example where the amount there of is 25 parts by weight as Comparative Example 1. (Additionally, this comparative example employs 74 parts by weight of butyl acrylate, which is also outside of the scope of the present claims.) Thus, even if the person skilled in the art refers to EP '322, he would not be motivated to increase the amount of copolymerizable monomers containing no aromatic ring in Kishioka to 80% by weight or more as recited in the present claims.

## Peeling strength

With respect to the peeling strength property of the claimed invention, the Examiner maintains that the double-sided adhesive sheet of Kishioka as modified by EP '322 is structurally and compositionally equivalent to that of the presently claimed. Therefore, the Examiner concludes that the claimed property would necessarily be present.

Appellants respectfully disagree for the reasons of record, which are incorporated herein by reference. Nametly, the combination of Kishioka et al and EP '322 would not necessarily result in the claimed total thickness of the PSA sheet, the same monomer as the major component in each of the PSA layers and/or the amount of the major monomer component for the reasons set forth above. As noted above, there are thousands of combinations of the thicknesses of the two PSA layers and there is no teaching or suggestion in the references to specifically lead to a combination of PSA layers having a thickness within the recited range. Also, as noted above, Kishioka, the cited references do not disclose, teach or suggest "the major monomer component constituting each pressure-sensitive adhesive layer is 80% by weight or more based on the whole amount of the monomer components". Consequently, the combination of Kishioka et al and EP '322 do not disclose, teach or suggest all elements of the present claims and therefore would not necessarily result in a double-sided PSA tape having the claimed peeling adhesive strengths. Thus, it cannot be said that the PSA tape of Kishioka modified by EP '322 would be compositionally equivalent to the claimed invention.

Since the PSA tape of Kishioka modified by EP '322 would not be structurally and compositionally equivalent to the claimed invention for the reasons set forth above, the

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properties recited in the claims are not necessarily present as it has been established that

inherency cannot be based on probabilities or possibilities.

In summary, the Examiner is not properly considering the claimed invention as a whole,

but is instead improperly considering obviousness of individual elements of the claims based on

improper hindsight and then improperly relying on inherency based on possibilities to make up

for missing elements of the present invention. Moreover, Okabe et al does not remedy the

deficiencies of Kishioka et al and EP '32 for the reasons of record and therefore, even if

combined with Kishioka and EP '322, the present invention would not have been achieved.

Accordingly, Appellants respectfully submit that the present invention is not rendered

obvious by the cited references, whether taken alone or in combination, and the obviousness

rejections should therefore be reversed.

**CONCLUSION** 

For the above reasons as well as the reasons set forth in Appeal Brief, Appellant

respectfully requests that the Board reverse the Examiner's rejections of all claims on Appeal.

An early and favorable decision on the merits of this Appeal is respectfully requested.

Respectfully submitted,

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